

Int'l App. No.: PCT/GB99/03280

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R is hydrogen, alkyl, aryl, or aralkyl;

R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl;

R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or,

R¹ and R³ together with the nitrogen to which they are attached form a single or fused, optionally substituted, saturated or unsaturated heterocyclic ring;

with the proviso that formula (IB) does not include the following compounds:

- 3-(4-methylpiperazin-1-yl)-4-phenyl-pyrrole-2,5-dione;
3-(4-ethylpiperazin-1-yl)-4-phenyl-pyrrole-2,5-dione;
3-(4-chlorophenyl)-4-(4-methyl-piperazin-1-yl)-pyrrole-2,5-dione;
3-[4-(diphenylmethyl)-1-piperazinyl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-methyl-3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-ethyl-3-phenyl-4-(4-chlorophenylpiperazino)-pyrrole-2,5-dione;
1-allyl-3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-phenylamino-4-phenyl-1H-pyrrole-2,5-dione;
3-phenyl-4-piperidin-1-yl-pyrrole-2,5-dione;
3-(3,5-dimethyl-1-phenyl-1H-pyrazol-4-yl)-4-morpholin-4-yl-pyrrole-2,5-dione;
3-indol-1-yl-4-(1-methyl-1H-indol-3-yl)-pyrrole-2,5-dione;
1-(1-methyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
1-1-(4-methyl-pentyl)-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
1-(1-dodecyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
3-[2,5-dihydro-4-(1H-imidazol-1-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1H-indole-1-carboxylic acid, 1,1-dimethylethyl ester;
3-[2-benzo[b]thien-2-yl-3-[4-(dimethylamino)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-carbamimidothioic acid, propyl ester;
3-(dimethylamino)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(phenylamino)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(methylamino)-1H-pyrrole-2,5-dione;
3-(1H-imidazo[4,5-b]pyridin-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-chloro-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-amino-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1H-pyrrolo[2,3-b]pyridin-1-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1-piperidinyl)-1H-pyrrole-2,5-dione;
1-acetyl-3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrol-3-yl]-1H-indole;
3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;

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3-(1H-benzotriazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-imidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-[3-[(dimethylamino)methyl]-1H-indol-1-yl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(3,5-dimethyl-1-phenyl-1H-pyrazol-4-yl)-4-(4-morpholinyl)-1H-pyrrole-2,5-dione;
3-amino-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-amino-4-(5-methoxy-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1H-Indole-1-carboxylic acid, 3-(4-amino-2,5-dihydro-1-methyl-2,5-dioxo-1H-pyrrol-3-yl)-, 1,1-dimethylethyl ester ;
3-(1H-indol-3-yl)-1-methyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;
Glycine, N-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, ethyl ester ;
3-amino-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
1-(4-methylphenyl)-3-[(4-methylphenyl)amino]-4-phenyl-1H-pyrrole-2,5-dione ;
3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione ;
1-[3-[(3-aminopropyl)amino]propyl]-3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1-[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]-3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-[3-(4-methyl-1-piperazinyl)propyl]-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
3,3'-[iminobis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
3,3'-[1,4-piperazinediylbis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
3-amino-4-(3,4-dimethoxyphenyl)-1H-pyrrole-2,5-dione ;
3-[(5-aminopentyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[5-[(2-aminoethyl)amino]pentyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[(2-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[(6-aminohexyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[(7-aminoheptyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[2-[(2-aminoethyl)amino]ethyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
Benzenepropanamide, .alpha.-amino-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
Pentanoic acid, 4-amino-5-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]-5-oxo-, (S)- ;
Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)- ;
Benzenepropanamide, .alpha.-amino-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)- ;

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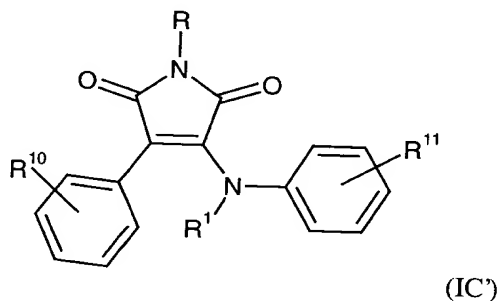
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Butanamide, 4-[(aminoiminomethyl)amino]-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
 3-(4-methylphenyl)-1-phenyl-4-(phenylamino)-1H-pyrrole-2,5-dione;
 1,3-bis(4-methylphenyl)-4-[(4-methylphenyl)amino]-1H-pyrrole-2,5-dione;p
 3-amino-1,4-diphenyl-1H-pyrrole-2,5-dione;
 3-(4-methylphenyl)-4-(4-morpholinyl)-1-phenyl-1H-pyrrole-2,5-dione ;
 3-(4-methylphenyl)-1-phenyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;
 3-amino-4-(4-methylphenyl)-1-phenyl-1H-pyrrole-2,5-dione ;
 3-(3,5-dimethyl-1-phenyl-1H-pyrazol-4-yl)-4-(4-morpholinyl)-1H-pyrrole-2,5-dione;
 3-(4-nitrophenyl)-1-phenyl-4-phenylamino-1H-pyrrole-2,5-dione ;
 3-amino-1-methyl-4-p-tolyl-1H-pyrrole-2,5-dione;
 3-(2-diethylamino-ethylamino)-4-phenyl-pyrrole-2,5-dione;
 3-[butyl-(2-diethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;
 3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;
 3-[benzyl-(2-diethylamino-ethyl)-amino]-1-methyl-4-phenyl-pyrrole-2,5-dione;
 3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-(4-chloro-phenyl)-pyrrole-2,5-dione;
 3-[benzyl-(2-diethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;
 3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-(3-methoxy-phenyl)-pyrrole-2,5-dione;
 3-(4-chloro-phenyl)-4-[2-(4-methyl-piperazin-1-yl)-ethylamino]-pyrrole-2,5-dione;
 3-[2-(4-methyl-piperazin-1-yl)-ethylamino]-4-phenyl-pyrrole-2,5-dione;
 3-phenyl-4-(diethylamino)-pyrrole-2,5-dione;
 3-phenyl-4-(benzylamino)-pyrrole-2,5-dione;
 1-methyl-3-phenyl-4-(2-diethylaminoethylamino)-pyrrole-2,5-dione;
 1-allyl-3-phenyl-4-(2-dimethylaminoethylamino)-pyrrole-2,5-dione; and;
 1,3-diphenyl-4-piperidino-pyrrole-2,5-dione.

3. (Amended) A compound according to claim 2 of formula (IC')



wherein;

R is hydrogen, alkyl, aryl or aralkyl;
 R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;
 R¹⁰ represents hydrogen or one or more substituents, suitably up to three, selected from the group consisting of: alkoxycarbonyl, alkoxyalkyl, perfluoroalkyl, perfluoroalkylS-, perfluoroalkylO-,

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phenyl(di-C₁₋₆alkoxy)C-, benzoyl, C₁₋₆alkylSO₂-, -[(CH=CH)₂]-, phenyl, nitro, -OCH₂O-, benzyloxy, phenoxy, halo, hydroxy, alkyl, alkoxy, amino, mono- or di-alkyl amino and thioalkyl;

R¹¹ represents hydrogen or one or more substituents, suitably up to three, selected from the group consisting of: substituted or unsubstituted C₁₋₆alkyl, phenyl, benzyl, substituted or unsubstituted C₁₋₆alkylS-, halo, hydroxy, substituted or unsubstituted C₁₋₆alkoxy, substituted or unsubstituted phenoxy, indolyl, naphthyl, carboxy, C₁₋₆alkoxycarbonyl, benzyloxy, phenoxy, pentafluorophenoxy, nitro, substituted or unsubstituted carbamoyl, substituted or unsubstituted C₁₋₆alkylcarbonyl, benzoyl, cyano, perfluoroC₁₋₆alkylSO₂-, C₁₋₆alkylNHSO₂-, oxazolyl, substituted or unsubstituted phenylS-, C₁₋₆alkylpiperazinyl-, C₁₋₆alkylcarbonylpiperazinyl-, 1,2,3-thiadiazolyl, pyrimidin-2-yloxy, N-[pyrimidin-2-yl]-N-methylamino, phenylamino, C₁₋₆alkylsulphonylamino, N-morpholinylcarbonyl, cyclohexyl, adamantyl, trityl, substituted or unsubstituted C₁₋₆alkenyl, perfluoroC₁₋₆alkyl, perfluoroC₁₋₆alkoxy, perfluoroC₁₋₆alkylS-, aminosulphonyl, morpholino, (diC₁₋₆alkyl)amino, C₁₋₆alkylCONH-, (diC₁₋₆alkoxy)phenyl(CH₂)_nNHC(O)CH(phenyl)S- where n is 1 to 6, and C₁₋₆alkylCON(C₁₋₆alkyl)-, thiazolidinedionylC₁₋₆alkyl, phenylCH(OH)-, substituted or unsubstituted piperazinylC₁₋₆alkoxy, substituted or unsubstituted benzoylamino; or -(CH₂)_x-, -SCH=N-, -SC(C₁₋₆alkyl)=N-, -OCF₂O-, -[CH=CHC(O)O]-, -[N=CH-CH=CH]-, -CH=N-NH-, -CH=CH-NH-, -OC(NHC₁₋₆alkyl)=N-, -OC(O)NH-, -C(O)NMeC(O)-, -C(O)NHC(O)-, -(CH₂)_xC(O)-, -N=N-NH-, -N=C(C₁₋₆alkyl)O-, -O(CH₂)_xO-, -(CH₂)_xSO₂(CH₂)_y-, and -N(C₁₋₆alkylcarbonyl)(CH₂)_x-, where x and y are independently 1 to 4; with the proviso that (IC') does not include:

3-phenylamino-4-phenyl-1H-pyrrole-2,5-dione;

1-(4-methylphenyl)-3-[(4-methylphenyl)amino]-4-phenyl-1H-pyrrole-2,5-dione;

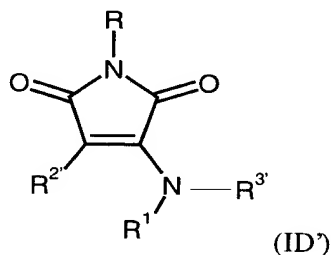
3-(4-methylphenyl)-1-phenyl-4-(phenylamino)-1H-pyrrole-2,5-dione;

1,3-bis(4-methylphenyl)-4-[(4-methylphenyl)amino]-1H-pyrrole-2,5-dione, or;

3-(4-nitrophenyl)-1-phenyl-4-phenylamino-1H-pyrrole-2,5-dione.

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5. (Amended) A compound according to claim 2 of formula (ID')



wherein

R is hydrogen, alkyl, aryl or aralkyl;

R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R'' is phenyl, substituted phenyl or indolyl;

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R^{3'} is hydrogen, alkyl, cycloalkyl, phenyl, substituted phenyl, C₁₋₆ alkylphenyl wherein the phenyl group is optionally substituted, alkoxyalkyl, substituted or unsubstituted heterocyclyl, with the proviso that formula (ID) does not include the following compounds:

- 3-[2-benzo[b]thien-2-yl-3-[4-(dimethylamino)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-carbamimidothioic acid, propyl ester;
- 3-(dimethylamino)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-methyl-4-(phenylamino)-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-methyl-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-methyl-4-(methylamino)-1H-pyrrole-2,5-dione;
- 3-(6-chloro-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(6-amino-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 1-acetyl-3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrol-3-yl]-1H-indole;
- 3-amino-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-amino-4-(5-methoxy-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 1H-Indole-1-carboxylic acid, 3-(4-amino-2,5-dihydro-1-methyl-2,5-dioxo-1H-pyrrol-3-yl)-, 1,1-dimethylethyl ester;
- 3-(1H-indol-3-yl)-1-methyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;
- Glycine, N-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, ethyl ester;
- 3-amino-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
- 1-[3-[(3-aminopropyl)amino]propyl]-3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 1-[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]-3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-[3-(4-methyl-1-piperazinyl)propyl]-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
- 3,3'-[iminobis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
- 3,3'-[1,4-piperazinediylbis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
- 3-amino-4-(3,4-dimethoxyphenyl)-1H-pyrrole-2,5-dione;
- 3-[(5-aminopentyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[[5-[(2-aminoethyl)amino]pentyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[(2-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[(6-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[(7-aminoheptyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-[[2-[(2-aminoethyl)amino]ethyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- Benzenepropanamide, .alpha.-amino-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)-;

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Pentanoic acid, 4-amino-5-[[5-[[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]-5-oxo-, (S)-;

Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[2-[[[5-[[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)-;

Benzenepropanamide, .alpha.-amino-N-[2-[[[5-[[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)-;

Butanamide, 4-[(aminoiminomethyl)amino]-N-[5-[[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)-;

3-amino-1,4-diphenyl-1H-pyrrole-2,5-dione;

3-(4-methylphenyl)-1-phenyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;

3-amino-4-(4-methylphenyl)-1-phenyl-1H-pyrrole-2,5-dione;

3-amino-1-methyl-4-p-tolyl-1H-pyrrole-2,5-dione;

3-(2-diethylamino-ethylamino)-4-phenyl-pyrrole-2,5-dione;

3-[butyl-(2-diethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;

3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;

3-[benzyl-(2-dimethylamino-ethyl)-amino]-1-methyl-4-phenyl-pyrrole-2,5-dione;

3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-(4-chloro-phenyl)-pyrrole-2,5-dione;

3-[benzyl-(2-diethylamino-ethyl)-amino]-4-phenyl-pyrrole-2,5-dione;

3-[benzyl-(2-dimethylamino-ethyl)-amino]-4-(3-methoxy-phenyl)-pyrrole-2,5-dione;

3-(4-chloro-phenyl)-4-[2-(4-methyl-piperazin-1-yl)-ethylamino]-pyrrole-2,5-dione;

3-[2-(4-methyl-piperazin-1-yl)-ethylamino]-4-phenyl-pyrrole-2,5-dione;

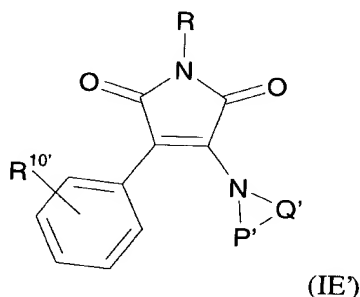
3-phenyl-4-(diethylamino)-pyrrole-2,5-dione;

3-phenyl-4-(benzylamino)-pyrrole-2,5-dione;

1-methyl-3-phenyl-4-(2-diethylaminoethylamino)-pyrrole-2,5-dione, and;

1-allyl-3-phenyl-4-(2-dimethylaminoethylamino)-pyrrole-2,5-dione.

6. (Amended) A compound according to claim 2 of formula (IE')



wherein R is hydrogen, alkyl or aralkyl;

R^{10'} represents hydrogen or one or more, suitably up to three, substituents selected from the group consisting of: alkoxy, halo, and nitro;

P'-Q' represents -(CH₂)_aO(CH₂)_b-, -(CH₂)_aS(CH₂)_b-, -(CH₂)_c-, -(CH₂)_dCH(G)(CH₂)_e-, -(CH₂)_aN(ZZ)(CH₂)_b-, where a, b, d, and e are independently 1 to 4, c is 1 to 6, ZZ is hydrogen,

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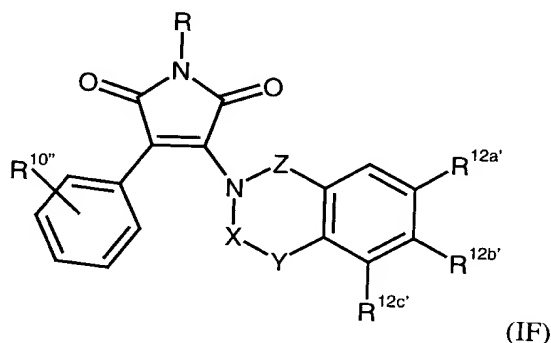
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alkyl, aryl, or alkylcarbonyl, and G is alkyl, amido, hydroxyalkyl, aralkyl, or hydroxy, with the proviso that (IE') does not include:

- 3-phenyl-4-piperidin-1-yl-pyrrole-2,5-dione;
- 3-(4-methylpiperazin-1-yl)-4-phenyl-pyrrole-2,5-dione;
- 3-(4-ethylpiperazin-1-yl)-4-phenyl-pyrrole-2,5-dione;
- 3-(4-chlorophenyl)-4-(4-methyl-piperazin-1-yl)-pyrrole-2,5-dione;
- 3-(4-methylphenyl)-4-(4-morpholinyl)-1-phenyl-1H-pyrrole-2,5-dione
- 3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
- 3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
- 1-methyl-3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
- 1-ethyl-3-phenyl-4-(4-chlorophenylpiperazino)-pyrrole-2,5-dione;
- 1-allyl-3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione, and;
- 1,3-diphenyl-4-piperidino-pyrrole-2,5-dione.

7. (Amended) A compound according to claim 2 of formula (IF)



wherein R is hydrogen, alkyl or aralkyl;

R10'' is one or more, suitably up to three, substituents selected from the group consisting of perfluoroalkyl, halo, nitro, alkoxy, arylcarbonyl, and alkyl;

Z is a bond or an alkylene chain;

-X-Y- is -CH=N-, -(CH₂)_t-, -(CH₂)_uCH(U)-, -(U)CH(CH₂)_u-, -CH=CH-, -(CH₂)_vC(alkyl)₂-, -C(O)C(alkyl)₂-, -C(O)O-, where t, u, and v are independently 1 to 4, and U is alkyl, carboxy, alkoxycarbonyl, hydroxyalkyl, and amido;

R12a', R12b', and R12c' are each independently hydrogen, nitro, alkoxy, 4-ethylpiperazin-1-yl, 4-BOC-piperazin-1-yl, 4-methyl-piperazin-1-yl, 4-methyl-piperazin-1-yl, halo, alkyl, piperazin-1-yl, perfluoroalkyl, and alkylsulphonylamino.

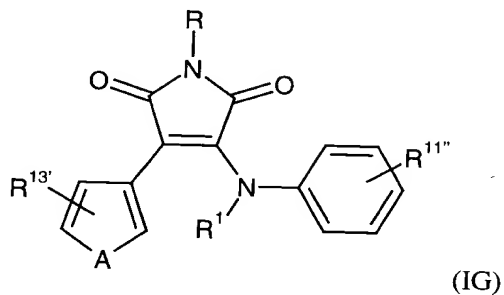
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8. (Amended) A compound according to claim 2 of formula (IG)



wherein

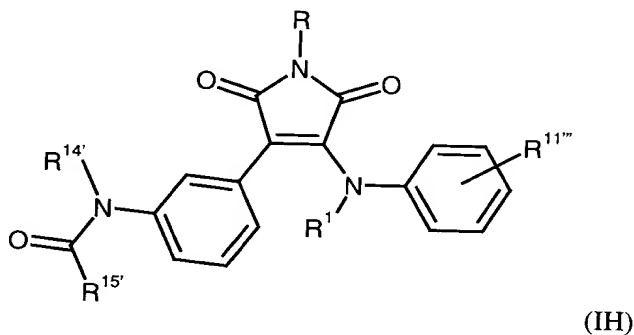
R is hydrogen, alkyl, aryl or aralkyl;

R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

A is N(alkyl), oxygen, or sulphur.

R''' is one or more, suitably up to three, substituents selected from the group consisting of hydrogen, halo, alkyl, alkylthio, -S-CH=N-, phenoxy, -(CH₂)_w-, hydroxy, carboxy, -O(CH₂)_xO-, hydroxyalkyl, and alkylaminosulphonylalkyl, where w and x are independently 1 to 4.

9. (Amended) A compound according to claim 2 of formula (IH)



wherein

R is hydrogen, alkyl, aryl or aralkyl;

R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R''' is -(CH₂)_{aa}-, where aa is 1 to 4;

R'' is hydrogen;

R'' is alkyl, unsubstituted or substituted phenylamino, unsubstituted or substituted phenylalkylamino, cyclohexylamino, alkenylamino, phenyl, benzyl, styryl, or alkylamino.

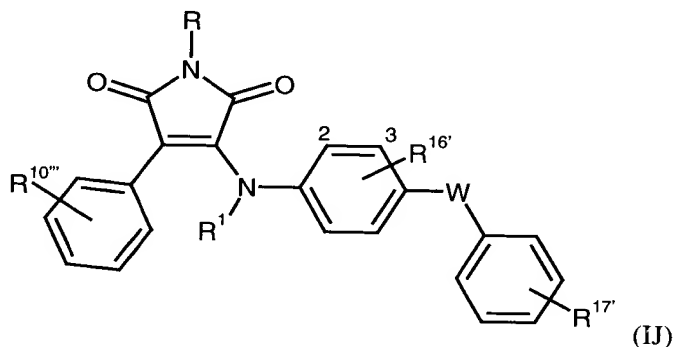
10. (Amended) A compound according to claim 2 of formula (IJ)

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wherein

R is hydrogen, alkyl, aryl or aralkyl;

R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

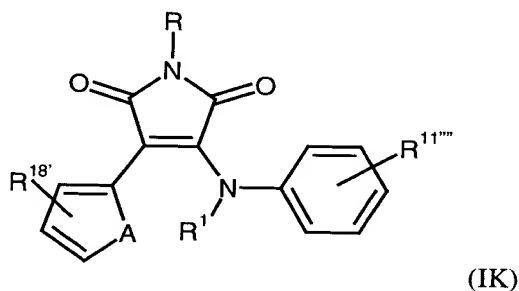
R^{10'''} represents one or more, suitably up to three, substituents independently selected from alkoxy or halo;

R^{16'} represents one or more, suitably up to three, substituents independently selected from hydrogen, carboxy, alkoxycarbonyl, or alkylaminocarbonyl;

R^{17'} represents one or more, suitably up to three, substituents independently selected from carboxy, alkoxycarbonyl, halo, alkylaminocarbonyl, nitro, or hydrogen;

W is sulphur, oxygen, or substituted or unsubstituted NH.

11. (Amended) A compound according to claim 2 of formula (IK)



wherein

R is hydrogen, alkyl, aryl or aralkyl;

R' is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R^{11'''} represents one or more, suitably up to three, substituents independently selected from halo and hydroxy;

R^{18'} represents one or more, suitably up to three, substituents independently selected from hydrogen, alkyl, and $-(CH=CH)_2-$;

A is sulphur.

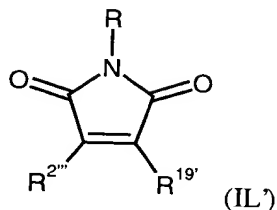
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12. (Amended) A compound according to claim 2 of formula (IL')



wherein R is hydrogen, alkyl, aryl or aralkyl;

R^{2''} is unsubstituted or substituted heterocyclyl or unsubstituted or substituted aryl;

R^{19'} is unsubstituted or substituted heterocyclyl, or a quaternised salt thereof, with the proviso that formula (IL') does not include the following compounds:

- 3-indol-1-yl-4-(1-methyl-1H-indol-3-yl)-pyrrole-2,5-dione;
- 1-(1-methyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
- 1-1-(4-methyl-pentyl)-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
- 1-(1-dodecyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
- 3-[2,5-dihydro-4-(1H-imidazol-1-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1H-indole-1-carboxylic acid, 1,1-dimethylethyl ester;
- 3-(1H-imidazo[4,5-b]pyridin-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-methyl-4-(1H-pyrrolo[2,3-b]pyridin-1-yl)-1H-pyrrole-2,5-dione;
- 3-(1H-indol-3-yl)-1-methyl-4-(1-piperidinyl)-1H-pyrrole-2,5-dione;
- 3-[4-(diphenylmethyl)-1-piperazinyl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-benzotriazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-imidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-indol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-indazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-[3-[(dimethylamino)methyl]-1H-indol-1-yl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
- 3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
- 3-(1H-indol-1-yl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione, and;
- 3-(3,5-dimethyl-1-phenyl-1H-pyrazol-4-yl)-4-(4-morpholinyl)-1H-pyrrole-2,5-dione.

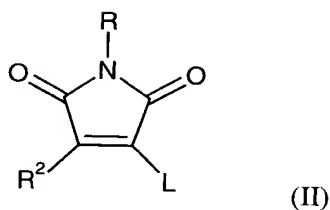
13. (Amended) A process for the preparation of a compound of the invention which process comprises reaction of a compound of formula (II):

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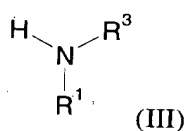


wherein

R is hydrogen, alkyl, aryl, or aralkyl;

R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl;

and L is a leaving group, with a compound of formula (III):



wherein

R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

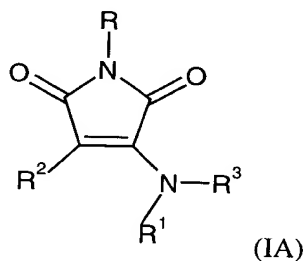
R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted;

and thereafter, if required, carrying out one or more of the following optional steps:

- (i) converting a compound of formula (I) to a further compound of formula (I);
- (ii) removing any necessary protecting group;
- (iii) preparing an appropriate derivative of the compound so formed.

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16. (Amended) A compound of formula (IA)



wherein

R is hydrogen, alkyl, aryl, or aralkyl;

R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl;

R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or,

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R¹ and R³ together with the nitrogen to which they are attached form a single or fused, optionally substituted, saturated or unsaturated heterocyclic ring;
or a pharmaceutically acceptable derivative thereof, for use as an active therapeutic substance, with the proviso that formula (IA) does not include the following compounds:

3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-[4-(diphenylmethyl)-1-piperazinyl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-methyl-3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-ethyl-3-phenyl-4-(4-chlorophenylpiperazino)-pyrrole-2,5-dione;
1-allyl-3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-indol-1-yl-4-(1-methyl-1H-indol-3-yl)-pyrrole-2,5-dione;
1-(1-methyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)pyridinium chloride;
1-[1-(4-methyl-pentyl)-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl]pyridinium chloride;
1-(1-dodecyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
3-[2-benzo[b]thien-2-yl-3-[4-(dimethylamino)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-
carbamimidothioic acid, propyl ester;
3-(dimethylamino)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(phenylamino)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(methylamino)-1H-pyrrole-2,5-dione;
3-(1H-imidazo[4,5-b]pyridin-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-chloro-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-amino-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1H-pyrrolo[2,3-b]pyridin-1-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1-piperidinyl)-1H-pyrrole-2,5-dione;
1-acetyl-3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrol-3-yl]-
1H-indole;
3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-benzotriazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-imidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-[3-[(dimethylamino)methyl]-1H-indol-1-yl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-amino-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-amino-4-(5-methoxy-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1H-Indole-1-carboxylic acid, 3-(4-amino-2,5-dihydro-1-methyl-2,5-dioxo-1H-pyrrol-3-yl)-, 1,1-
dimethylethyl ester ;
3-(1H-indol-3-yl)-1-methyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;
Glycine, N-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, ethyl ester ;

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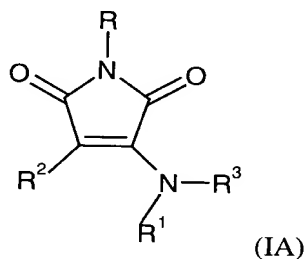
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3-amino-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione ;
1-[3-[(3-aminopropyl)amino]propyl]-3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1-[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]-3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-[3-(4-methyl-1-piperazinyl)propyl]-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
3,3'-[iminobis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
3,3'-[1,4-piperazinediylbis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione];
3-[(5-aminopentyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[5-[(2-aminoethyl)amino]pentyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[(2-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[(6-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[(7-aminoheptyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[2-[(2-aminoethyl)amino]ethyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
Benzenepropanamide, .alpha.-amino-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
Pentanoic acid, 4-amino-5-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]-5-oxo-, (S)- ;
Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)-;
Benzenepropanamide, .alpha.-amino-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)- ;
Butanamide, 4-[(aminoiminomethyl)amino]-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
3-phenyl-4-(diethylamino)-pyrrole-2,5-dione;
3-phenyl-4-(benzylamino)-pyrrole-2,5-dione;
1-methyl-3-phenyl-4-(2-diethylaminoethylamino)-pyrrole-2,5-dione;
1-allyl-3-phenyl-4-(2-dimethylaminoethylamino)-pyrrole-2,5-dione; and;
1,3-diphenyl-4-piperidino-pyrrole-2,5-dione.

17. (Amended) A pharmaceutical composition which comprises a compound of formula (IA)



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wherein

R is hydrogen, alkyl, aryl, or aralkyl;

R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl;

R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl;

R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or,

R¹ and R³ together with the nitrogen to which they are attached form a single or fused, optionally substituted, saturated or unsaturated heterocyclic ring;

or a pharmaceutically acceptable derivative thereof, and a pharmaceutically acceptable carrier, with the proviso that formula (IA) does not include the following compounds:

3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-[4-(diphenylmethyl)-1-piperazinyl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-methyl-3-phenyl-4-(4-phenylpiperazino)-pyrrole-2,5-dione;
1-ethyl-3-phenyl-4-(4-chlorophenylpiperazino)-pyrrole-2,5-dione;
1-allyl-3-phenyl-4-(4-methylpiperazino)-pyrrole-2,5-dione;
3-indol-1-yl-4-(1-methyl-1H-indol-3-yl)-pyrrole-2,5-dione;
1-(1-methyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)pyridinium chloride;
1-[1-(4-methyl-pentyl)-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl]pyridinium chloride;
1-(1-dodecyl-2,5-dioxo-4-phenylamino-2,5-dihydro-1H-pyrrol-3-yl)-pyridinium chloride;
3-[2-benzo[b]thien-2-yl-3-[4-(dimethylamino)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-
carbamimidothioic acid, propyl ester;
3-(dimethylamino)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(phenylamino)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(methylamino)-1H-pyrrole-2,5-dione;
3-(1H-imidazo[4,5-b]pyridin-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-chloro-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(6-amino-9H-purin-9-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1H-pyrrolo[2,3-b]pyridin-1-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-methyl-4-(1-piperidinyl)-1H-pyrrole-2,5-dione;
1-acetyl-3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[[4-(trifluoromethyl)phenyl]amino]-1H-pyrrol-3-yl]-
1H-indole;
3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-benzotriazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-imidazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-(1H-indazol-1-yl)-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-[3-[(dimethylamino)methyl]-1H-indol-1-yl]-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;

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3-(1H-benzimidazol-1-yl)-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-1-yl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-amino-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-amino-4-(5-methoxy-1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1H-Indole-1-carboxylic acid, 3-(4-amino-2,5-dihydro-1-methyl-2,5-dioxo-1H-pyrrol-3-yl)-, 1,1-dimethylethyl ester ;
3-(1H-indol-3-yl)-1-methyl-4-[(phenylmethyl)amino]-1H-pyrrole-2,5-dione;
Glycine, N-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, ethyl ester ;
3-amino-4-(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione;
3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
1-[3-[(3-aminopropyl)amino]propyl]-3-[[3-[(3-aminopropyl)amino]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
1-[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]-3-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-(1H-indol-3-yl)-1-[3-(4-methyl-1-piperazinyl)propyl]-4-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1H-pyrrole-2,5-dione;
3,3'-[iminobis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3,3'-[1,4-piperazinediylbis(3,1-propanediylimino)]bis[4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[(5-aminopentyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[5-[(2-aminoethyl)amino]pentyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[(2-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[(6-aminoethyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione ;
3-[(7-aminoheptyl)amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
3-[[2-[(2-aminoethyl)amino]ethyl]amino]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione;
Benzenepropanamide, .alpha.-amino-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
Pentanoic acid, 4-amino-5-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]-5-oxo-, (S)- ;
Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)-;
Benzenepropanamide, .alpha.-amino-N-[2-[[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]amino]ethyl]-, (S)- ;
Butanamide, 4-[(aminoiminomethyl)amino]-N-[5-[[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]amino]pentyl]-, (S)- ;
3-phenyl-4-(diethylamino)-pyrrole-2,5-dione;
3-phenyl-4-(benzylamino)-pyrrole-2,5-dione;
1-methyl-3-phenyl-4-(2-diethylaminoethylamino)-pyrrole-2,5-dione;
1-allyl-3-phenyl-4-(2-dimethylaminoethylamino)-pyrrole-2,5-dione; and;
1,3-diphenyl-4-piperidino-pyrrole-2,5-dione.

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